

### Remarks

This is in response to the final Office Action mailed on November 14, 2005. Claims 2, 8, and 14 are canceled without prejudice or disclaimer, and subject matter from claims 2, 8, and 14 is incorporated into claims 1, 7, and 13, respectively. Support for further amendments to claims 1, 7, and 13 is found, for example, at page 17, lines 11-17 of the application. Claims 3 and 9 are amended to depend from claims 1 and 7, respectively. Claims 1, 3-7, 9-13, and 15-18 remain pending in the application. Reconsideration and allowance are respectfully requested in view of the following remarks.

#### I. Interview Summary

Applicant wishes to thank the Examiner for the courtesy extended to Applicant's representative, Robert A. Kalinsky, during the telephonic interview on February 9, 2006. During the interview, U.S. Patent No. 6,405,191 and claim 1 were discussed. No agreement regarding the allowability of the claims was reached.

#### II. Claim Rejections

Claims 1-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bhatt et al., U.S. Patent No. 6,405,191, and Gharachorloo et al., U.S. Patent No. 6,738,868. This rejection is respectfully traversed, and the correctness of the rejection is not conceded.

Claim 1 is directed to a method for filtering one or more messages for transmission to a subscriber computing system according to an individual information request criteria. Claim 1 recites constructing a binary decision diagram implication graph for each individual information request criteria specified for each subscriber, the binary decision diagram implication graph including a plurality of nodes expressing each information request criteria in an if-then-else normal form, the nodes being evaluated until a logical true or false node is reached.

It is advantageous to use binary decision diagrams to evaluate information requests because binary decision diagrams allow for the use of implications that increase the processing efficiency of the system. Application, p. 13, ll. 7-13.

The rejection identifies the following portion of Bhatt as disclosing construction of a binary decision diagram implication graph:

In one embodiment, the evaluation of the rules for determining whether an incoming message is to be sent to a subscriber is performed using a two-tier evaluation method. In another aspect of the invention, messages are implicitly published to the subscriber when the publisher is the relational database system itself.

Bhatt, col. 1, ll. 60-65. The rejection states that one skilled in the art at the time of the invention would know that the array of rules map in the relational database format disclosed by Bhatt is another form of saying the construction of a binary decision diagram implication graph. Action, p. 6, ll. 7.

However, as previously noted, Bhatt discloses a system wherein a subscription rule is parsed and normalized into a series of expressions joined by disjunctive operators (e.g., "OR"). Bhatt, col. 5, lines 48-59. Each disjunctive expression is treated as a separate subscription rule and is stored in an "Array of Rules." Bhatt, col. 5, lines 61-63. An incoming message is evaluated using the disjunctive expressions. See Bhatt, col. 5, l. 55 - col. 10, l. 50. Bhatt therefore discloses use of the Array of Rules including a plurality of expressions joined by disjunctive operators, such as the "OR" operator. The Array of Rules is not a binary decision diagram implication graph including a plurality of nodes expressing each information request criteria in an if-then-else normal form.

It is respectfully suggested that simply because the "Array of Rules" disclosed by Bhatt is stored in a relational database does not change this fact. A relational database can be described as follows:

A database or database management system that stores information in tables—rows and columns of data—and conducts searches by using data in specified columns of one table to find additional data in another table. In a relational database, the rows of a table represent records (collections of information about separate items) and the columns represent fields (particular attributes of a record). In conducting searches, a relational database matches information from a field in one table with information in a corresponding field of another table to produce a third table that combines requested data from both tables.

Microsoft® Computer Dictionary, Fourth Edition, p. 380 (1999). It is respectfully suggested that this definition fails to suggest that a relational database forms a binary decision diagram implication graph, or even how the data stored in the relational database is parsed.

Instead, it is respectfully asserted that the fact that the Array of Rules is stored in a relational database does not suggest that the Array of Rules forms a binary decision diagram implication graph, or that the Array of Rules is parsed any differently than that disclosed by Bhatt; i.e., by using a disjunctive operator rather than the "if-then-else" format of binary decision diagrams.

If Official Notice is being taken that one skilled in the art would understand that a "relational database format" is another form of a "binary decision diagram implication graph," it is respectfully requested that documentary support for this assertion be provided. See MPEP 2144.03 (stating that official notice should only be taken of facts that are capable of instant and unquestionable demonstration as being "well-known" in the art and, if the assertion is traversed, the Examiner should cite a reference in support of his or her position).

Gharachorloo is silent with respect to construction of a binary decision diagram implication graph.

Reconsideration and allowance of claim 1, as well as claims 3-6 that depend therefrom, are therefore respectfully requested.

Claim 7 is directed to a computer program product readable by a computer system. Claim 7 recites, among other limitations, constructing a binary decision diagram implication graph for each individual information request criteria specified for each subscriber, the binary decision diagram implication graph including a plurality of nodes expressing each information request criteria in an if-then-else normal form, the nodes being evaluated until a logical true or false node is reached. Claim 7 is therefore allowable for at least reasons similar to those provided above with respect to claim 1. Reconsideration and allowance of claim 7, as well as claims 9-12 that depend therefrom, are respectfully requested.

Claim 13 is directed to a publication-subscription broker server computing system. Claim 13 recites, among other limitations, constructing a binary decision diagram implication graph for each individual information request criteria specified for each subscriber, the binary decision diagram implication graph including a plurality of nodes expressing each information request criteria in an if-then-else normal form, the nodes being evaluated until a logical true or false node is reached. Claim 13 is therefore allowable for at least reasons similar to those provided above with respect to claim 1. Reconsideration and allowance of claim 13, as well as claims 15-18 that depend therefrom, are respectfully requested.


III. Conclusion

The remarks set forth above make certain arguments in support of the patentability of the pending claims. The applicant respectfully notes that there may be other reasons that the pending claims are patentably distinct over the cited references and reserves the right to raise any such reason or argument in the future.

Favorable reconsideration in the form of a Notice of Allowance is respectfully requested. Please contact the undersigned attorney with any questions regarding this application.

Respectfully submitted,  
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